

Self-efficacy mechanism at work: The context of environmental volunteer travel

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ABSTRACT

As public funding to support nature conservation continues to decline, building a commitment to ecological restoration through volunteer travel is key to addressing a range of environmental concerns. This study contributes the first utilization of Bandura's self-efficacy (SE) mechanism in the context of environmental volunteer travel demonstrating how environmental stewardship, hedonic experience, and environmental SE relate to one another in this particular setting. The study results suggest that while environmental volunteer travelers appear to be driven by one's beliefs that participation in ecological restoration is a worthwhile activity; motivations to participate in ecological restoration projects can be strengthened or weakened depending on the promise of hedonic experiences. These results shed light on the likely shift in what motivates young adults to engage in travel and volunteering in ecological restoration projects around the world. This is important because a better understanding of what can persuade young adults to travel and engage in ecological restoration enables for the tailoring of environmental volunteering programs to meet individuals' expectations.

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Introduction

Ecological restoration has traditionally involved efforts by local governments attempting to refurbish at-risk, damaged or destroyed ecosystems to some standard of "health" (Burton, Robertson, Iverson, & Risser, 1988; Miles, Sullivan, & Kuo, 1998; Packard, 1988). More recently, however, the success of ecological restoration projects throughout the globe depends on individuals' willingness to contribute to the well-being of endangered ecosystems through activities such as conservation careers, political involvement in nature conservation or environmental volunteering (Suárez-Orozco, Hernández, & Casanova, 2015). Indeed, given the negative ecological consequences of anthropogenic pressures on the natural environment (Gren & Huijbens, 2012; Steffen, Crutzen, & McNeill, 2007) and the reduction of financial support for nature conservation (Eagles, 1994; Lorimer, 2009), environmental volunteers are presently at the core of organizations tasked to manage environmental programs (Bramston, Pretty, & Zammit, 2011). Ever since the volunteering movement has become an essential resource for ecological restoration (e.g. Lorimer, 2009;

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McGehee, 2002; Randle & Dolnicar, 2009; Ryan, Kaplan, & Grese, 2001) it makes an increasingly needed contribution in collecting data used to monitor species or supporting the management of threatened habitats (Donnelly, Crowe, Regan, Begley, & Caffarra, 2014; Perring et al., 2015, Pescott et al., 2015; Ryan et al., 2001). Thus, attracting and retaining an adequate supply of environmental volunteers is a key task (McDougale, Greenspan, & Handy, 2011).

Much of the earlier research has conceptualized environmental volunteering as a social service, civic engagement, or social movement (e.g. Binder & Blankenberg, 2016; McGehee, 2002; Randle & Dolnicar, 2009; Ryan et al., 2001). In this perspective, volunteers are regarded as helpers who provide physical labor, monitor habitats, and publicize environmental causes (e.g. Measham & Barnett, 2008; Randle & Dolnicar, 2009; Ryan et al., 2001; Tomazos & Cooper, 2012), whereby evidence of restored ecosystems is perceived as a direct and worthwhile outcome of volunteering efforts (e.g. Bramston et al., 2011; Byron & Curtis, 2002). This narrative constructs the environmental volunteer travel as motivated primarily by doing something worthy for nature and society (e.g. Bramston et al., 2011; Cnaan & Goldberg-Glen, 1991; Lorimer, 2010; McGehee, 2002; Ryan et al., 2001).

Volunteer travel tends to be seen as an opportunity to pursue a more sustainable form of tourism (e.g. McGehee, 2002; Wearing, Young, & Everingham, 2017). When conceptualized as sustainable tourism, environmental volunteering has been associated with the notion of ecological restoration driven by global citizenship and environmental stewardship (e.g. McGehee, 2012; Schild, 2018; Wearing et al., 2017). Whereas, tourism scholars have also explored the holiday character of volunteer travel (e.g. Tomazos & Cooper, 2012; Weaver, 2015; Wearing & McGehee, 2013). The "holiday" character of volunteer travel was more recently brought up in the context of participation in park area enhancement activities by Weaver (2015) and in the context of environmental volunteer travel among millennials by Strzelecka, Nisbett, and Woosnam (2017). Results of both studies show that ecological restoration projects attract volunteers because visiting and restoring remote ecosystems is exciting and adventurous. Whereas Strzelecka et al. (2017) further suggest that while "millennial" volunteers may believe that participation in ecological restoration projects is worthwhile, they appear to engage in environmental volunteering to pursue hedonic experiences through traveling to consume and explore those unique ecosystems. Importantly, this indicates that for "millennials," hedonic values and self-indulgence can be a catalyst for participation in ecological restoration projects.

Tourism researchers have also been interested in learning about the fulfilment individuals derive from their pursuit of volunteering (e.g. Mustonen, 2006; Schild, 2018), or how the experience of volunteering shapes an individual and promotes social change (Fisher, Campbell, & Svendsen, 2012; McGehee, 2012; McGehee & Santos, 2005); however, few scholars noted that there is a relatively poor understanding of how social psychological mechanisms such as self-efficacy (SE) can help explain young adults' intention to volunteer (e.g. Lee & Lina Kim, 2018; McGehee, 2002, 2012; McGehee & Santos, 2005) and which factors can strengthen it. More empirical research is needed to understand these processes.

In a series of publications concerning such social-psychological explanations of volunteer travel, McGehee offered a perspective of volunteering as a social movement (Breinlinger & Kelly, 1996 in McGehee, 2002) to introduce the concept of SE as a catalyst for participation in volunteering (e.g. McGehee, 2002, 2012; McGehee & Santos, 2005). In her research, McGehee followed Wiggins et al. (1994) in how they conceptualized SE from the social movement perspective: "one's sense of ability to overcome obstacles" (in McGehee, 2002) to position SE as a prerequisite for participation in volunteering movement. On the other hand, personal SE was also theorized, operationalized and extensively studied by Albert Bandura, who viewed SE as peoples' perceptions of their abilities to master their "given attainments." Bandura also developed infamous SE theory that can be very helpful in explaining how individual levels of SE change.

Thus, while the notion of SE was introduced to the study of volunteering earlier, the study at hand contributes the first utilization of Bandura's SE theory (e.g. 1977, 1982, 1997, 2002) in the context of environmental volunteer travel to understand how environmental stewardship/SE/

hedonic values, relate to one another. Following earlier discussions concerning motivations for environmental volunteering (e.g. Brown, 2005; Butcher & Smith, 2010; Ryan et al., 2001; Strzelecka et al., 2017; Wearing, 2015; Wearing & McGehee, 2013), hedonic experience is proposed as a catalyst for environmental SE regarding this type of pursuit.

We propose overall then, that a better understanding of how the notions of hedonism, and personal SE, involvement in environmental stewardship relate to each other in the context of environmental volunteering offers a base for nurturing volunteers commitment to ecological restoration projects. In other words, the results of this study may provide state organizations and volunteer group leaders with a clearer picture of a social psychological mechanism that prompts volunteers to devote their time and energy to challenge negative environmental change and promote more sustainable travel experiences.

Literature review

Environmental voluntourism

Our understanding of environmental volunteering has been drawn from the literature on volunteering in general. Volunteers are arguably a kind of traveler searching for experiences that they typically cannot get from their daily lives (Kelly, 1983; Wearing, Deville, & Lyons, 2008, p. 64). According to Wearing (2001), however, volunteer travelers (or voluntourists) can be distinguished from other types of tourists, precisely because they “volunteer in an organised way to undertake holidays that might involve aiding or alleviating the material poverty of some groups in society, the restoration of certain environments or research into aspects of society or environment” (Wearing, 2001, p. 1). Travel offers unique opportunities for interaction among people from different parts of the world, learning about their cultures, which in the end broadens the volunteer perspective (Benson & Seibert, 2009). Altruism and community are considered central values to the experience of the volunteer (Wearing et al., 2017). By participating in ecological restoration, for instance, young adults can contribute to global nature conservation efforts, while fulfilling a need of self-actualization, relaxation and stimulation (Halpenny & Caissie, 2003). Arguably, the travel and participation in ecological restoration projects can be also viewed as a postmodern quest for “the authentic” experience (Wearing, 2001). As rightly pointed out by Wearing et al. (2017), this somewhat romantic view of volunteering has been subjected to criticism regarding primarily political dimensions of volunteering, including power, empowerment and equity.

In the steps that followed, scholars distinguished different volunteering styles based on different motivations and values driving volunteer travelers. Environmental volunteering, just like other volunteering projects, is likely to appeal to these volunteering styles (e.g. Cousins, Evans, & Saddler, 2009; Halpenny & Caissie, 2003; Lorimer, 2010; Wearing, 2015; Strzelecka et al., 2017). For instance, a vacation-minded volunteer (e.g. Brown, 2005; Brown & Morrison, 2003) is motivated primarily by opportunities to engage with different cultural contexts and establish new friendships with like-minded individuals (Brown, 2005). Vacation-minded volunteers tend to see environmental volunteer travel as exciting learning experience and an opportunity for self-development. On the other hand, “volunteer-minded” travelers are fully dedicated to volunteer activities (Brown, 2005). A similar conclusion was reached by Callanan and Thomas (2005), who classified volunteers along a behavioral spectrum ranging from shallow volunteering (i.e. pursuing personal interests and self-development), intermediate volunteering, to deep volunteering (i.e. individuals with a genuine interest in the projects such as ecological restoration). Shallow volunteers have less experience and therefore prefer short-term volunteer adventures that require less engagement (Callanan & Thomas, 2005). Shallow volunteers tend to be driven mainly by individual experiences (Wymer, Self, & Findley, 2010).

The act of volunteering can fulfill different functions for different individuals and motivation can change over time, such that the reasons for the initial decision to volunteer may differ from

those who continue to engage in volunteering (McGehee, 2012; Snyder et al., 1999). On the other hand, Coghlan and Fennell (2009) argued that while volunteer tourists may behave in an altruistic manner, personal benefits derived from the experience of volunteering by and large dominate the experience. Thus, it would appear that volunteer tourism represents a form of social egoism, which however, can benefit local environments and communities. McGehee (2002, 2012), in contrast, argued that volunteering can be a pro-active approach to empowerment and to bring about social action.

While volunteer travel in general has been discussed in a great detail, empirical studies focusing on environmental volunteer travel are less common (McGehee, 2012; Measham & Barnett, 2008). Likewise, the critical understanding of what attracts young adults to travel and participate in ecological restoration projects and how social psychological mechanisms can possibly work is fairly limited within the travel and tourism literature (e.g. McGehee, 2012; Weaver, 2015).

In an early study of environmental volunteering, Ryan et al. (2001) assessed the relationship between volunteer motivations and commitment to a project. They identified five motivations such as opportunity to do something good for the environment; opportunity to learn about our environment; opportunity to meet new people or see old friends and family, reflection, and opportunity to work for a well-organized project. Importantly, while the opportunity to do something good for the environment and the opportunity to learn about our environment were highly regarded by environmental volunteers, they were also quite unique motivations (Ryan et al., 2001, p. 637). The study showed that after participating in conservation volunteering, "volunteers are transformed in their outlook toward the environment, becoming more likely to landscape with native plants, more apt to want to protect natural areas and more attached to local natural areas" (Ryan et al., 2001, p. 644). Thus, the experience of volunteering in environmental projects changed participants' attitudes toward nature conservation. Around the same time, Wearing (2001) distinguished seven groups of motives to combine ecotourism with volunteering for environmental restoration: altruism, personal growth, professional development, cultural exchange, learning, travel, and adventure. He also noted that for many volunteers, participation in environmental restoration projects can facilitate a change towards the perception of the environment. The two aforementioned studies illustrate that travel and participation restoration projects can shape how volunteers feel about the environment and encourage further engagement with environmental volunteering.

Likewise, Bruyere and Rappe's (2007) surveyed volunteers from six organizations concerned with conservation of natural resource to understand their motivations. "Helping the environment" was the most important theme among the respondents (Bruyere & Rappe, 2007, p. 503). Measham and Barnett (2008) conducted interviews with volunteers and project coordinators to further explore six broad motivations underpinning environmental volunteerism: "contributing to community," "social interaction," "personal development," "learning about the environment," "a general ethic of care for the environment," and "an attachment to a particular place" (p. 540). Concluding their study, Measham and Barnett (2008) proposed that projects facilitating social contact and meaningful contribution to the environment are more likely to retain volunteers over the long-term. Finally, Campbell and Smith (2006) investigated the core values of volunteers engaged in a sea turtle conservation project. The value of "conservation" was found to be the main motivation for the participants. The authors also found that the volunteers prefer to work in an area that they think they will enjoy. These results are sustained in previous findings, suggesting that meeting new people and a sense of engagement in the environment in a meaningful way matter. The above research findings resonate with Gooch's (2003) notion that attachment to a particular local environment can be a motivating factor to volunteer, uniting an interest in caring for a place and developing an improved understanding of the place or McGehee's (2012) argument regarding volunteer travel, that participating in volunteer tourism can become a catalyst for participation in social movement.

More recently, Weaver (2015) surveyed 804 domestic visitors to two National Parks in Australia's Gold Coast region to identify the motivations and barriers for participation in 20 hypothetical volunteering and "quasi-volunteering" site enhancement activities that could help achieve park/visitor symbiosis. Results revealed two groups of motivations among the respondents: "altruism" and "indulgence". Weaver (2015) concluded that "having fun" and "keeping physically fit" appeared to be at least as important as "helping to make the park a better place for others" and "fulfilling a moral obligation to help the environment" (two "altruism" items) in motivating park visitors to participate in site enhancement. His findings should guide future research on the expectations of enjoyment, pleasure and excitement as catalysts for participation environmental volunteering. We come back to this issue at a later point in this paper.

In sum, we noted that while past research has substantially advanced the understanding of motivations underlying environmental volunteering, scholars have not empirically investigated how the social-psychological mechanism of SE in conjunction with expectation of hedonic experience affect young adults' intentions to pursue environmental volunteering. Therefore, we would like to underline that our contribution to a better understanding of why volunteers want to travel to participate in ecological restoration lies precisely in that we see the notion of fun, joy, and excitement about participating in environmental volunteering as a reinforcement of volunteers' beliefs that they can achieve desirable results (i.e. SE to restore damaged ecosystem).

Environmental SE

Personal efficacy (otherwise known as "SE") has been regarded as the fundamental mechanism of human agency (Bandura & Locke, 2003). The importance of personal efficacy in behavioral motivation and engagement can be seen in the central position of the construct in behavioral research, including the theory of planned behavior (Ajzen, 1991), value-belief-norm theory (Stern, 2000), and social cognitive theory (Bandura, 2002). While the theory of planned behavior posits that perceived behavioral control, which involves beliefs about SE and controllability, motivates behavior via intentions (Ajzen, 1991), the value-belief-norm theory argues that norms of helping stimulate pro-social behaviors stem from three factors: (a) personal values, (b) beliefs that these values are under threat, and (c) beliefs that the individual can take action to reduce the threat and restore those values (Stern, 2000). Finally, the social cognitive perspective recognizes that cognitive processes in fact, "play a prominent role in acquisition and retention of new behaviors" (Bandura, 1977, p. 192). SE theory purports that all processes of psychological change operate through the alteration of the individual's sense of personal mastery or efficacy (Bandura, 1997). Thus, personal efficacy is a core personal driver of adaptation and behavior change (Bandura, 2002).

Within this view, perceived SE is primarily concerned with judgments of personal ability to produce particular attainments through mobilizing the intention, cognitive resources, and behavior necessary to manage a potential situation (Bandura, 1997, 2002). In regards to the SE mechanism, Bandura (1977) distinguished two types of expectations: efficacy expectations and outcome expectations. While the first expectation is based on an estimate that a specific behavior will lead to a desirable outcome, the latter is the belief that an individual can actually perform this behavior. Efficacy expectations, for example, can determine how much an individual is willing to contribute and how long (s)he will carry on the activity in the face of obstacles. On the other hand, the concept of outcomes expectations relates to the argument that a sense of SE is a "propositional belief," meaning that when people think they have no power to achieve desirable results, they are less likely to attempt to act or bring about change (Bandura, 1997).

An important aspect of the SE belief is that it is highly dependent on situational factors, which means that general SE beliefs are unrelated to the SE beliefs within a specific behavioral domain such as environmental behavior (Bandura, 1997, 1986). Therefore, in order to study

engagement in environmental activism, environmental volunteering, or other proenvironmental behaviors, one must focus on an environmental domain of personal SE belief rather than investigate general SE. In this context, environmental SE is about the belief that the environmental behavior one wishes to pursue will lead to the desirable environmental outcome (Bandura, 1977).

Earlier studies suggest that SE beliefs can be strengthened in four ways: through mastery experiences such as direct participation in a given environmental behavior, through observations of others, through social persuasion such as communication via social media, and by one's physiological state when assessing personal capabilities, which can be enhanced by organizational context (e.g. Bandura, 1982; Gist, 1987; Reeb, Katsuyama, Sammon, & Yoder, 1998). In regards to the so-called mastery experience, Stern (2000) identified two broad types of environmental behaviors, public-sphere and private-sphere environmentalism. In terms of public sphere environmentalism, one can distinguish active (e.g. active involvement in environmental groups, ecological restoration, or demonstrations) and nonactive behaviors (e.g. joining environmental groups and policy support). Private sphere environmentalism changes may relate to the character of consumer behavior.

Personal involvement in nature conservation can be grouped under the umbrella notion of environmental stewardship towards, "the responsible use (including conservation) of natural resources in a way that takes full and balanced account of the interests of society, future generations, and other species, as well as of private needs, and accepts significant answerability to society" (Worrell & Appleby, 2000, p. 263). Thus, given that SE beliefs are strengthened through mastery experience and learning from others, one can propose involvement in environmental stewardship guides environmental SE beliefs about ecological restoration. This argument is crucial because while a plethora of studies have been undertaken to investigate antecedents of environmental behaviors, few, if any, offer a better understanding of how involvement in "conserving, managing, monitoring, advocating" for nature conservation (Fisher et al., 2012, p. 27) can shape environmental SE beliefs regarding participation in ecological restoration programs.

In brief, given the premise of a social cognitive perspective on environmental SE, we propose that environmental SE can be positively affected through the involvement in nature conservation. This proposition is plausible because individual involvement in nature conservation (environmental stewardship) strengthens beliefs and perceptions about the strong reciprocal relationship between society and the natural environment. The mechanism of personal SE (see Bandura, 1977, 2002) sheds some light on how involvement in nature conservation relates to these efficacy beliefs and how it can strengthen environmental SE. One could therefore hypothesize that SE to travel and volunteer in ecological restoration projects can be strengthened through environmental stewardship.

H1: Environmental stewardship will be positively related to environmental self-efficacy.

Besides a wide range of factors that can explain individual SE beliefs, Bandura (1982) proposed that the SE mechanism has a wider explanatory power with respect to the outcome of one's behavior. Bandura (1977) recalls Baum (1973) to remind us that behavior is related to its outcomes at the level of aggregate consequences. People process and synthesize feedback information from sequences of events about situational circumstances and the patterns and rates of actions that are needed to produce a desirable outcome. Because outcomes shape individual behavior by affecting how people think about it, beliefs about future reinforcement can have a greater effect on behavior than the actual reinforcement (Baron, Kaufman, & Stauber (1969) in Bandura, 1977). Moreover, the occurrence of behaviors that reinforce positive feedback will not increase if people believe, based on available information, that the same behaviors will not be rewarded in the future (Bandura, 1977).

Research findings generally support the notion that SE is a key predictor of intentions to pursue a task (e.g. Bandura & Locke, 2003; Maurer, 2001). SE affects behavior directly, as well as by influencing goals and aspirations, expectations regarding outcome, or perceived obstacles and opportunities (Bandura, 1995). It is also believed to affect peoples' choices, in terms of goals and how much effort they put toward a given activity. Overall, the conclusion is that personal SE beliefs can influence the outcomes of one's expectations. In an environmental domain, environmental SE beliefs should affect whether people intend to engage in certain environmental behaviors and actions.

The SE mechanism integrates people's judgment of how likely their proenvironmental behaviors will contribute to environmental well-being. To illustrate this, Schutte and Bhullar (2017) found stronger motivations for environmental behavior were related to higher environmental SE and a stronger belief in one's ability to change behavior if needed. These scholars studied the effect of brief interventions intended to strengthen SE beliefs regarding more environmentally friendly purchase choices. The intervention enhancing SE for making more environmentally friendly purchases had the strongest impact on purchase intentions (Schutte & Bhullar, 2017).

More empirical support for the relationship between SE and proenvironmental behavior comes from cross-sectional studies (e.g. Gupta & Ogden, 2009). Namely, research has illustrated that a stronger sense of SE can be associated with a greater likelihood to engage in proenvironmental consumption in general (see also Hanss & Böhm, 2010). Interestingly, media can contribute to the stronger indirect effect of personal environmental SE on all types of environmental behaviors (Huang, 2016). In the context of volunteering, McGehee (2002, 2012) discussed how participation in volunteer tourism, is brought on in part by pre-existing SE. Precisely, high level of SE is an important prerequisite for participation in volunteer tourism, "because an individual must possess a personal sense of her/his ability to overcome obstacles before participating in an organization advocating change to the status quo" (McGehee, 2012, p. 100). Finally, Lee and Lina Kim (2018) concluded that in the context of volunteer tourism research the theory of planned behavior has a better explanatory power when Bandura's notion of SE is included in the model, replacing perceived behavioral control. In other words, self-efficacy is stronger predictor than perceived behavioral control in predicting volunteer tourists' future behavioral intentions.

In line with the aforementioned SE mechanism and available research, we propose that SE beliefs are likely to prompt further commitment to environmental volunteering. In other words, personal SE is expected to influence intentions to travel and volunteer in ecological restoration projects, and how much effort one is likely to put forth. High levels of SE should result in stronger intentions to engage in the ecological restoration projects. This also means that if young people believe they have no power to meaningfully contribute to the ecological restoration of endangered ecosystems, they are less likely to engage in such projects (see Bandura, 2006). Thus, the following hypothesis is put forward:

H2: Environmental self-efficacy beliefs will be positively related to intention to travel to volunteer in ecological restoration projects.

In accordance with Bandura's model (e.g. 1977, 1995), environmental SE beliefs should be the primary drivers for environmental actions, however, other motivating factors can influence behavioral intention as well. Based on this premise, in the following passages, we develop an argument that hedonic motivations constitute strong drives for young people to travel and participate in ecological restoration projects worldwide.

Hedonism and travel for ecological restoration projects

Volunteering in ecological restoration is an important means by which young adults can aid in combatting the global effects of environmental degradation. In a recent study, Strzelecka et al. (2017) demonstrated that while this type of volunteering is viewed as environmental action, the

young adults appear to be driven by hedonic aspects of the experience rather than ecocentric values (see also Nisbett & Strzelecka, 2017). Venhoeven et al. (2013), in their examination of environmental motivations, suggested that even though people are driven by a desire for well-being, this sense of well-being goes beyond conventional feelings of hedonic contentment. In fact, the authors proposed that environmentally friendly consumption can increase another variation of well-being, which they call eudaimonic well-being (Venhoeven et al., 2013). Arguably, traveling to volunteer in ecological restoration projects blends these two forms of well-being as it combines both the pragmatic and romantic notions of ecological restoration—young adults can feel as though they are making a real contribution while enjoying remote destinations (Strzelecka et al, 2017).

One could further argue that traveling to volunteer can be seen as a more ethical form of tourism. In tourism theory, ethical travel builds on peoples' desires to make a meaningful contribution while visiting interesting places (e.g. Malone, McCabe, & Smith, 2014; Strzelecka et al., 2017). It has been discussed that the ethical traveler focuses on positive emotional experiences (i.e. emotion during the holiday) (e.g. Malone et al., 2014; Pearce, 2009). This means that emotional motivations can overshadow other, nonemotional benefits from travel (Alba & Williams, 2013).

Hirschman and Holbrook (1982) hedonic consumption framework allows for the depiction of experiential aspects of participation in ecological restoration. Specifically, it helps to explore how young adults experience this type of volunteering. Consequently, for Hirschman and Holbrook (1982), the value of an ecological restoration experience is precisely a function of hedonic and utilitarian aspects with emotional desires dominating utilitarian motivations. The hedonic motivations for engaging in ecological restoration are associated with "multisensory, fantasy, and the emotive aspects of one's experience with products" (Hirschman & Hallbrook, 1982, p. 92).

Building on Hirschman and Holbrook's (1982) hedonic experience model, Bandura's (1977, 1995) mechanism of environmental SE and discussion within the literature concerning the nature of environmental volunteering (e.g. McGehee & Santos, 2005; Strzelecka et al., 2017; Wearing, 2001; Weaver, 2015), we offer further insights into the relation between environmental SE beliefs, hedonic motivations and young adults' intentions to engage in ecological restoration projects. In other words, we can further assess the importance of hedonic values of ecological restoration.

In particular, given the potential of environmental SE to predict participation in proenvironmental activities, we suggest that the relation between hedonic motivations and behavioral intention to engage in ecological restoration is likely to be mediated by environmental SE beliefs. In brief, we propose that environmental SE beliefs mediate the relationship between hedonic motivations and young adults' intentions to travel for ecological restoration projects:

H3: Hedonic motivations will be positively related to environmental self-efficacy.

H4: Hedonic motivations will be positively related to young adults' intentions to travel to engage in ecological restoration projects.

H5: Environmental self-efficacy beliefs mediate the relationship between hedonic motivations and young adults' intentions to travel to engage in ecological restoration projects.

Methods

Participants and procedures

Participants ($n = 646$) for this study were millennials aged 18–36 ($M = 24.5$). Out of 646 participants, 65.9% were students (age varied between 18 and 24 years) at a large public university in the southwestern United States. They were recruited in 2016 during November and December. The remaining 34.1% were recruited via a Qualtrics panel survey comprised of individuals

Table 1. Confirmatory factor analysis for hedonic/utilitarian and behavior, environmental stewardship, environmental SE.

Factor and corresponding item	\bar{x}	Error	<i>R</i>	C.R
Hedonic	4.56			
Dull: exciting	4.65	1.60	0.83	20.69
Not delightful:delightful	4.63	1.53	0.86	21.63
Not sensuous:sensuous	4.18	1.64	0.88	16.90
Not fun:fun	4.70	1.53	0.88	22.08
Unpleasant:pleasant	4.79	1.48	0.86	21.61
Not thrilling:thrilling	4.13	1.60	0.77	19.17
Not happy:happy	5.00	1.53	0.82	20.51
Not playful:playful	4.20	1.60	0.74	18.55
Not enjoyable:enjoyable	4.96	1.49	0.89	22.23
Not cheerful:cheerful	4.68	1.53	0.83	20.79
Not amusing:amusing	4.20	1.60	0.71	–
Factor and corresponding item	\bar{x}	Error	<i>R</i>	C.R
Meaningfulness (environmental stewardship)	5.00			
Boring:interesting	4.82	1.66	0.81	15.21
Means nothing:means a lot to me	5.18	1.38	0.71	–
Appeal (environmental stewardship)	4.22			
Important:unimportant	4.33	2.02	0.78	23.27
Relevant:irrelevant	4.47	2.08	0.79	23.55
Exciting:unexciting	3.93	1.66	0.78	23.45
Appealing:unappealing	4.16	1.79	0.88	28.13
Fascinating:mundane	4.07	1.71	0.87	27.55
Involving:uninvolving	4.37	1.86	0.84	–
Factor and corresponding item	\bar{x}	Error	<i>R</i>	CR
Environmental SE	5.19			
I feel confident in my ability to help protect the planet.	4.69	1.43	0.69	–
I am capable of making a positive impact on the environment.	5.43	1.22	0.84	19.17
I am able to help take care of nature.	5.47	1.12	0.80	18.50
I believe I can contribute to solutions to environmental problems by my actions.	5.38	1.19	0.80	18.50
Compared to other people, I think I can make a positive impact on the environment.	5.00	1.30	0.77	17.76
Factor and corresponding item	\bar{x}	Error	<i>R</i>	CR
Behavior	4.43			
I would use my vacation to go on a conservation volunteering trip.	4.13	1.84	0.78	19.68
If someone sponsored a conservation volunteering trip, I would go.	5.15	1.66	0.78	19.64
I would pay to go on a conservation volunteering program.	3.49	1.78	0.70	17.44
I intend to participate in conservation volunteering.	4.32	1.67	0.92	22.99
I will try to participate in conservation volunteering.	4.68	1.69	0.93	23.30
I expect to participate in conservation volunteering.	4.19	1.66	0.90	22.68
I would like to learn more about conservation volunteering.	5.05	1.58	0.76	24.18
I will research conservation volunteering through social media.	4.40	1.74	0.72	–

Measure of model fit: χ^2 ($df = 646$) = 1225,721, $\chi^2/df = 2.736$ $p < 0.001$, CFI = 0.955, RMSEA = 0.052. *R* = standardized regression coefficient.

throughout the U.S. Qualtrics panel qualifiers were age (i.e. 24–36 years) and gender (i.e. 50/50 male/female) split. Given the research aimed to focus on “millennials” these Qualtrics criteria were chosen to compliment the students sample to include “millennials” older than 24 as well.

The total sample was largely comprised of females (67.6%), with some variation in race and ethnicity (69.6% white, 11.6% Black, 4.4% Asian, 13.2% mixed/other). Of those, 22.6% reported to be Hispanic/Latino, regardless of race. Slightly more than 32.2% had participated in volunteering at least once during the past 12 months prior to the study.

To collect self-reported responses from participants, the online survey platform, QualtricsTM was utilized. The online questionnaire contained sections pertaining to self-reported environmental SE, environmental stewardship, and hedonic experience associated with intention to travel for ecological restoration projects, and demographic information. The sampling procedure aimed to collect a pool of demographically diverse participants providing an opportunity to study environmental SE mechanism in the context of environmental volunteer travel among young adults (millennials) between the ages of 18 and 36. Wray-Lake, Flanagan, and Osgood (2010) analyses of trends in youth attitudes toward environmental responsibility pointed out that young people in the U.S. tend to see government and people in general as more responsible for environmental

Table 2. Construct reliability and validity.

	CR	AVE	MSV	MaxR(H)
Hedonic	0.95	0.65	0.46	0.96
Appeal	0.82	0.69	0.02	0.97
Meaningfulness	0.74	0.59	0.46	0.98
Environmental SE	0.89	0.61	0.28	0.97
Behavior	0.94	0.67	0.29	0.98

AVE: average variance extracted; CR: construct reliability; MSV: maximum shared variance.

problems than they themselves felt. Given the growing concern for global conservation and climate change within the U.S. in general and among students in particular, such a sample was considered appropriate (e.g. Strzelecka et al., 2017).

Variables

Hedonic

The hedonic value scale presented here asked young adults: What is in travel ecological restoration projects for you? The scale was adapted from the seminal paper by Babin, Darden, and Griffin (1994) to depict respondents' attitudes toward travel for ecological restoration projects as a hedonic experience. The measure used a 7-point semantic differential scale (e.g. 1 = dull, 7 = exciting). From the CFA results (Table 1), one item was removed due to a standardized factor loading below the acceptable value of 0.60 (Hair, Black, Babin, Anderson, & Tatham, 2006). Reliability of the 11-item scale measuring hedonic motivations in environmental volunteer travel was excellent ($\alpha = 0.954$) (Table 2).

Environmental Stewardship

A self-reported environmental stewardship measurement was obtained from the Cornell Lab of Ornithology (2017). The items reflect the general view of nature conservation that focuses on personal relevance (e.g. Greenwald & Leavitt, 1984; Rothschild, 1984). From this perspective, involvement in nature conservation is simply associated with a general level of interest in or concern about an issue without reference to a specific position (Hupfer & Gardner, 1971). The measure used a 7-point Likert-type scale (1 = important, 7 = unimportant). Because of the lack of earlier studies using the measure, exploratory factor analysis was run to investigate dimensionality of the construct. CFA (Table 1) confirmed two dimensions of the *Environmental Stewardship* construct. The first factor consisted of four items focused on the "meaningfulness" of environmental stewardship to the respondent (defined below as *Meaningfulness*). Two more items were removed from the factor due to standardized factor loadings being below the acceptable value of 0.60 (Hair et al., 2006), leaving a total of two items defined as *Meaningfulness*. Reliability for *Meaningfulness* measure was acceptable ($\alpha = 0.74$). The second factor consisted of six items describing respondents' perceptions of the *Appeal* of environmental stewardship. Reliability of the *Appeal* factor was excellent ($\alpha = 0.93$) (Table 2).

Environmental SE

To Arnould, Price, and Zinkhan (2004), self-efficacy is an indication of the level of confidence people have in their personal motivation, cognitive resources, and actions to successfully performing a task. Because general SE beliefs are unrelated to the SE beliefs within a specific behavioral domain (Bandura, 1997, 1986), when one wishes to study the engagement in environmental activism, environmental volunteering, or other environmental behaviors, one must focus on an environmental domain. The environmental SE scale was adapted from The UC CA Naturalist Program (Merenlender, 2017). The adapted measure used items on a 7-point Likert-type scale

Table 3. Discriminant validity analysis from EnvStew, EnvEff, hedonic, and behavior CFA.

	1	2	3	4	5
Hedonic	0.65 ^a	0.02 ^b	0.30	0.17	0.27
Appeal	0.14 ^c	0.69	0.03	0.01	0.02
Meaningfulness	0.55	0.17	0.59	0.21	0.20
Environmental SE	0.41	0.11	0.45	0.61	0.19
Behavior	0.52	0.14	0.44	0.44	0.67

^aThe bold diagonal elements are the measures of average variance explained for each factor.

^bAbove diagonal elements are the squared correlations between factors.

^cBelow diagonal elements are the correlations between factors.

(1 = not likely, 7 = very likely). From the CFA results (Table 1), one item was removed due to a standardized factor loading below the acceptable value of 0.60 (Hair et al., 2006). Reliability of the *Environmental SE* scale was very good ($\alpha = 0.89$) (Table 2).

Behavior

A self-reported consumer inventory scale was used to assess young adults' intentions to participate in future environmental volunteerism. The scale was adapted from previous consumer inventory (Zaichkowsky, 1985) and tourism behavior (Sparks, 2007) measures. Self-report inventories have been successfully used in past environmental research (Kormos & Gifford, 2014). Items were presented using a 7-point Likert-type scale (1 = not likely, 7 = very likely) to gauge likely participation behavior. Based on the results from the CFA analysis (Table 1), three items were removed due to a standardized factor loading below the critical value of 0.60 (Hair et al., 2006). Reliability for the measure was good ($\alpha = 0.89$) (Table 2).

Construct validity was determined by examining convergent and discriminant validities. Convergent validity was shown by all CR values exceeding 1.96 at a significance level of $p < 0.001$ (Table 1). Discriminant validity was demonstrated through average variance extracted (AVE) estimates exceeding the squared correlations between each factor (Hair et al., 2006) (Table 3). This test of discriminant validity ensures that each factor is unique by testing to see whether the amount of unique variance explained by each factor (i.e. AVE) is higher than the amount of variance shared between different factors (i.e. the squared correlation). Overall, construct validity was established for the five factors within the measurement model.

Results

To determine how environmental SE related to environmental stewardship, hedonic motivations as well as intentions to volunteer in ecological restoration projects, several iterations of the paths were tested as an alternative to the proposed model. The proposed theoretical model was parsimonious (Figure 1) and revealed an acceptable fit: χ^2 ($N = 646$) = 14.944, $df = 3$; $\chi^2/df = 4.981$, $p = 0.002$, GFI = 0.991 CFI = 0.982, RMSEA = 0.079 (Byrne, 1994; Hu & Bentler, 1999) (Figure 1; Table 4).

The proposed hypotheses 1–4 were tested using two criteria: (1) the statistical significance of the relationship and (2) the nature of the relationship as hypothesized (+ or –). Hypothesis one, (H1)—*Environmental stewardship will be positively related to environmental SE*—was partially supported by the path model (Table 4). There is a positive relationship between the perceived *Meaningfulness* of ecological restoration in general and a belief that one's participation in ecological restoration projects is worthwhile and will lead to the desirable environmental outcome ($\beta = 0.31$; $p = 0.001$). However, the relationship between the *Appeal* of ecological restoration and environmental SE was not supported.

The second hypothesis (H2)—*Environmental self-efficacy beliefs will be positively related to intention to volunteer in ecological restoration*—was supported by the path model. The result

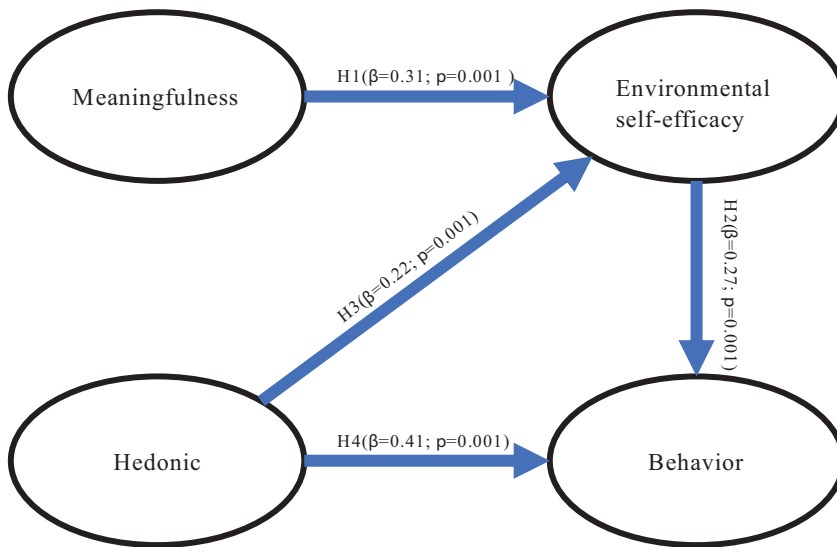


Figure 1. A Parsimonious model of behavioral intentions to volunteer in ecological restoration projects Model fit: χ^2 ($N = 646$) = 14.944, $df = 3$; $\chi^2/df = 4.981$, $p = 0.002$, GFI = 0.991 CFI = 0.982, RMSEA = 0.079.

Table 4. Hypothesized relationship between constructs and observed relationship from path analysis.

Hypothesized relationship	Std. reg. weights	p	R^2_{SMC}
Meaningfulness \rightarrow Environmental. SE	0.31	0.001	0.22 ^a
Environmental SE \rightarrow Behavior	0.27	0.001	0.33 ^b
Hedonic \rightarrow Environmental SE	0.22	0.001	
Hedonic \rightarrow Behavior	0.41	0.001	

$\chi^2 = 14.948$, $df = 6$, $\chi^2/df = 4.98$, $p = 0.002$, GFI = 0.991, CFI = 0.981, RMSEA = 0.79.

^a $R^2_{SMC} = 0.22$; 22% of Environmental SE variance can be explained by its predictors (Hedonic, Meaningfulness).

^b $R^2_{SMC} = 0.33$; 33% of Behavior variance can be explained by its predictors (Environmental SE, Hedonic).

shows positive relationship between a belief that one's participation in ecological restoration is worthwhile action leading to desirable outcome and intention to volunteer in ecological restoration project ($\beta = 0.27$; $p = 0.001$) (Table 4).

Likewise, the third hypothesis (H3)—*Hedonic motivations will be positively related to environmental self-efficacy*—was supported, demonstrating that a positive relationship exists between hedonic motivations and a belief that one's participation in ecological restoration is worthwhile ($\beta = 0.22$; $p = 0.001$). Finally, hypothesis four (H4)—*Hedonic motivations will be positively related to young adults' intentions to travel to engage in ecological restoration project*—was also supported. Thus, a positive relationship exists between young adults' motivations due to hedonic value of ecological restoration and intentions to travel to volunteer in such projects ($\beta = 0.41$; $p = 0.001$) (Table 4).

To investigate the final hypothesis (H5)—*Environmental self-efficacy beliefs mediate the relation between hedonic motivation and young adults' intentions to travel to engage in ecological restoration project*—a mediation analysis was conducted using a bootstrapping method (Baron & Kenny, 1986). Two-tailed significance was reported as an indicator of significant relationships between the two variables. The direct relationship between hedonic motivations and behavior was significant ($p = 0.001$). Next, the indirect effect between environmental SE on behavioral intent was examined: the effect of mediating the path from hedonic motivations through environmental SE beliefs to behavioral intent was significant ($p = 0.001$). Even with the environmental SE value as mediating variable included, the direct effect of hedonic values on intention to travel and participate in ecological restoration remained significant ($p = 0.001$). It can be concluded therefore that the effect of hedonic values on behavioral intent to volunteer in ecological

restoration is only partially mediated by a belief that one's participation in ecological restoration projects is worthwhile and will lead to the desirable environmental outcome (SE). Thus, H5 was only partially supported.

Discussion

Ecological restoration understood as “the attempt to compensate for novel influences on an ecosystem in order to allow the system to continue on or to resume its original, or natural, trajectory,” was conceived in the late twentieth century as a response to human-induced environmental degradation (Jordan, 2003, p. 61). Since then it has become globally recognized as a key component in conservation programs and essential to the quest for the long-term sustainability of the planet (Aronson & Alexander, 2013; Jordan, 2003; McDougle et al., 2011; Peachey, 2008).

On the one hand, ecological restoration volunteering has been framed as part of the solution to global environmental degradation and biodiversity loss (Lorimer, 2010). As such environmental volunteering has been conceptualized as a type of environmental activism (e.g. Lorimer, 2010; Schattle, 2008) or a social movement (McGehee, 2002, 2012) because it is believed to provide young adults with an opportunity to help (Lorimer, 2010) that leads to social change (McGehee, 2002). On the other hand, scholars have argued that volunteering is a complex phenomenon and explored its holiday-like character. Because the notion of environmental volunteering embraces environmental activism and holiday, it should be conceptualized to equally account for both components (e.g. Ryan, Kaplan & Grese, 2001; Strzelecka et al., 2017; Weaver, 2013, 2015).

Much of the past research on environmental volunteering has adapted a functional approach which has focused on motivations for participating in ecological restoration projects (e.g. Bruyere & Rappe, 2007; Measham & Barnett, 2008; Ryan et al., 2001; Wearing, 2015). Among a number of identified motives “helping the environment” and “learning” were ranked the highest (e.g. Ryan et al., 2001), whereas “programs that facilitate social contact” and “making volunteers feel like they are making significant contributions to the environment” seem to be more likely to retain volunteers over the long-term (e.g. Measham & Barnett, 2008).

In line with the notion of environmental volunteering that embraces both environmental activism and holiday-like experience are findings from the study of participants in *Volunteer for Nature*, an Ontario-based nature conservation program, who were primarily motivated by both potential pleasure and the potential to leave a legacy (Caissie & Halpenny, 2003). The “environmental activism” aspect also resonates with McGehee's (2012) notion of environmental volunteering as social movement, whereas the holiday-like character of environmental volunteering connects to Wearing's (2015) discovery that “having fun” can be a primary motive for participation in ecological restoration projects.

To the rich discussion of volunteer travel (in general) and environmental volunteer travel (in particular), Strzelecka et al. (2017) added that environmental volunteering may reflect a growing trend towards a more ethical and therefore sustainable way to travel combining proenvironmental activities with enjoyment and pleasure (for more discussion of ethical travel see Malone et al., 2014). In this context, this study results lead to a very simple, in a sense, but at the same time very important realization: environmental volunteering can be and should be looked at as a combination of both the pragmatic and romantic notions of ecological restoration. While the pragmatic aspect of ecological restoration (concrete contribution to nature conservation) reconnects with the idea of ecomodernism, the more romantic notion of environmental volunteering encourages young adults to conceptualize participation in ecological restoration projects as a hedonic experience.

The current study moves the field forward as it helps to understand the social-psychological mechanisms underlying environmental volunteer travel by illustrating how environmental SE can

be strengthened by hedonic values of ecological restoration projects among “millennials.” This then suggests that while participation in environmental volunteering is likely to change because of a sense of environmental SE (understood as a sense of accomplishment and contribution millennials’ travel and volunteering in ecological conservation projects can make to global nature conservation efforts and how effective they think this contribution can be), hedonic values can be a catalyst that strengthen SE among this group of volunteers. In other words, it appears that young environmental volunteers are driven by the promise of hedonic experience, and that their beliefs in that ecological restoration is a worthwhile activity (i.e. environmental SE belief) can be strengthened or weakened by how joyful they think environmental volunteering can be. This is not only interesting from an ethical perspective, but also an important practical result because it adds nuance to the earlier discussion by Strzelecka et al. (2017) and compliments findings from Ryan et al. (2001), Bruyere and Rappe (2007), Measham and Barnett (2008), and Weaver (2015) to name a few. To be more specific, our research builds on and adds to the previous studies by showing that while environmental volunteers want to see that the project they engage with can make a real contribution to nature conservation and that it is a feasible undertaking (conceptualized as environmental SE), how joyful and pleasurable they find some particular projects can reinforce their commitment.

The current study also offers some evidence that contemporary environmental volunteer travel does not represent a “transition in society from an anthropocentric view, where the world is interpreted in terms of people and their values, to an ecocentric view, where the world fosters the symbiotic relationship between humans and nature” (Wearing, 2001, p. 157). In contrast, the experience of environmental volunteering is likely to be driven by a postmodern quest for ‘the authentic’ (MacCannell, 1976), with ‘the authentic’ being identified as the experience of restoring rare and declining habitats and deteriorating ecosystems. We shall, therefore, further propose that participation in ecological restoration can be considered a type of sustainable consumption of nature fulfilling the hedonic desires alongside the “I can do it” attitude reflected in the environmental SE needed to pursue the task. The importance of positive environmental outcomes of this sustainable consumption is a crucial part of the experience and directly affects intentions to engage in ecological restoration pursuits.

Taking the discussion forward, we also propose that participation in ecological restoration projects can be seen as a “saleable quality” of the volunteer traveler (Bauman, 2007). By adopting Bauman’s notion of “consumption” and the role it plays in a modern society:

“To consume ... means to invest in one’s own social membership, which in a society of consumers translates as ‘saleability’: obtaining qualities for which there is already a market demand”. (p. 56)

we can then see volunteers as those who can brag about their experience and demonstrate “evidence” on their social media profiles.

A valid point was made by Gössling and Stavrinidi (2016), who concluded that because social media encourages the posting of travel-related content through guiding themes (e.g. “Where are you now?”) and other tools illustrating global travel patterns, in this simple way it supports broader “societal patterns of mobility glamorization” (p. 740). In a society where travel contributes to social capital, network members derive social status out of their mobility patterns. Gössling and Stavrinidi (2016) further argued that social media platforms encourage profile owners to express such “travelness” and through this prompt, similar types of travel from peers (p. 740). In line with this argument is another proposition; namely that participation in ecological restoration projects can be viewed as a type of “travelness” among these young adults and therefore they are motivated by hedonic experiences. In this case, the role of social media should be further explored to understand ways in which young adults express hedonic values regarding ecological restoration projects worldwide.

Worth further discussion is perhaps also the relationship between the perceived importance of conservation efforts in general (*Meaningfulness*) and a belief in worthiness of volunteering for

ecological restoration projects. Findings suggest that young adults perceive participation in ecological restoration projects as feasible and worth pursuing (i.e. environmental SE) when one finds it important to contribute to nature conservation goals (*Meaningfulness*). This means that overall attitudes toward nature conservation and perceived importance of conservation efforts (broadly conceptualized as environmental stewardship) matter and shape environmental SE beliefs, which is then crucial for young adults' decision to engage in ecological restoration. This finding resonates again with McGehee's (2012) model of volunteering as a social movement because it positions involvement in nature conservation as a prerequisite for environmental SE.

Last but not least, the research deconstructs environmental volunteer travel intentions to challenge the view that the millennials are less environmentally active when compared to past generations (e.g. Twenge, Campbell, & Freeman, 2012). In contrast, the results of this study underlined the possibility that millennials invest in new ways of engaging in nature conservation that embrace the element of fun and enjoyment. Environmental volunteer travel can be one of those ways.

Conclusion

With declining public funding to support nature conservation, building a continuous commitment to ecological restoration through volunteering is an important way to address a range of environmental concerns (e.g. Anheier & Salamon, 2006; Rodriguez, Balch, & Rodríguez-Clark, 2007; Wearing & McGehee, 2013). This study highlights the two components that are likely to inspire young adults to engage in environmental volunteer travel (i.e. environmental SE and hedonism) that we hope can inform organizations striving to attract individuals willing to pay for the experience.

Thus, while we agree there needs to be growing concern about the possibility that environmentalism is declining among young adults, a better understanding of why they want to participate in ecological restoration creates opportunities to address environmental volunteering as one-of-a-kind travel experiences. In fact, concern about the decline in environmental-political activism seems to be in line with a general concern about a widespread apathy and alienation from the traditional modes of political participation in representative democracies (Norris, 2003). Kahn (2002) suggests that, in terms of environmental engagement, one of the most pressing problems of our age may be *environmental generational amnesia*. The *environmental generational amnesia* hypothesis poses that "people take the natural environment they encounter during childhood as the norm against which they measure environmental degradation" (Kahn, 2002, p. 113). As the next generations lose positive affiliations with nature, they also accept negative environmental experiences as the norm. This becomes especially problematic because ecological restoration can be an important way to respond to the environmental conditions of the Anthropocene. Apathetic attitudes are also problematic because in the Anthropocene, humans must use their growing social, economic, and technological powers to make life better for themselves, stabilize the climate, and protect the natural world (Asafu-Adjaye & Blomqvist, 2015). Thus, in relation to the results of this study, one should note that promoting the experience of ecological restoration as a hedonic experience and a form of "travelness" steeped in environmental SE is a step towards a brighter future of environmental activism. Perhaps the presence of a hedonic motivation for ecological restoration travel is not all bad news.

In closing, this study is of importance to the community of scholars because it challenges how we think about environmental volunteering in remote "natures." For young environmental activists, desires of hedonic experience appear to be affecting how and where they choose to engage in ecological restoration projects. More importantly, their beliefs in positive environmental outcomes of environmental volunteering can be reinforced by those hedonic desires.

Moreover, the study contributes to theory within the travel and tourism literature by illuminating the potential role of the SE in environmental volunteering experiences.

Disclosure statement

No potential conflict of interest was reported by the authors.

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References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–221.
- Alba, J. W., & Williams, E. F. (2013). Pleasure Principles: A Review of Research on Hedonic Consumption, *Journal of Consumer Psychology*, 23, 2–18.
- Anheier, H. K., & Salamon, L. M. (2006). The nonprofit sector in comparative perspective. In W. W. Powell (Ed.), *The nonprofit sector: A research handbook* (2nd ed.; pp. 89–116). New Haven, Connecticut: Yale University Press.
- Arnould, E., Price, L., & Zinkhan, G. (2004). *Consumers* (2nd ed.). New York: Irwin/McGraw Hill.
- Aronson, J., & Alexander, S. (2013). Ecosystem restoration is now a global priority: Time to roll up our sleeves. *Restoration Ecology*, 21(3), 293–296.
- Asafu-Adjaye, J., & Blomqvist, L. (2017, September 11). An Ecomodernist Manifesto. Retrieved from www.ecomodernism.org.
- Babin, B. J., Darden, W. R., & Griffin, M. (1994). Work and/or fun: Measuring hedonic and utilitarian shopping value. *Journal of Consumer Research*, 20(4), 644–656.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191–215.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37(2), 122–147.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1995). Self-efficacy. In A. S. R. Manstead & M. Hewstone (Eds.), *Blackwell encyclopedia of social psychology* (pp. 453–454). Oxford: Blackwell.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Bandura, A. (2002). Environmental sustainability by sociocognitive deceleration of population growth. In P. Schmuck (Ed.), *Psychology of sustainable development* (pp. 209–238). The Netherlands: Kluwer Academic Publishers.
- Bandura, A. (2006). Guide for constructing self-efficacy scales. In F. Pajares & T. Urdan (Eds.), *Self-efficacy beliefs of adolescents*, (Vol. 5., pp. 307–337). Greenwich, CT: Information Age Publishing.

- Bandura, A., & Locke, E. A. (2003). Negative self-efficacy and goal effects revisited. *The Journal of Applied Psychology*, 88(1), 87–99.
- Baron, A., Kaufman, A., & Stauber, K. A. (1969). Effects of instructions and reinforcement-feedback on human operant behavior maintained by fixed-interval reinforcement. *Journal of the Experimental Analysis of Behavior*, 12(5), 701–712.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182.
- Bauman, Z. (2007). *Consuming life*. Oxford: Polity Press.
- Benson, A., & Seibert, N. (2009). Volunteer tourism: Motivations of German participants in South Africa. *Annals of Leisure Research*, 12, 3–4.
- Binder, M., & Blankenberg, A.-K. (2016). Environmental concerns, volunteering and subjective well-being: Antecedents and outcomes of environmental activism in Germany. *Ecological Economics*, 124, 1–16.
- Bramston, P., Pretty, G., & Zammit, C. (2011). Assessing environmental stewardship motivations. *Environment and Behavior*, 43(6), 776–788.
- Breinlinger, S., & Kelly, C. (1996). *The Social Psychology of Collective Action: Identity Injustice and Gender*. Philadelphia, PA: Taylor & Francis.
- Brown, S., & Morrison, A. M. (2003). Expanding Volunteer Vacation Participation An Exploratory Study on the Mini-Mission Concept. *Tourism Recreation Research*, 28(3), 73–82.
- Brown, S. (2005). Travelling with a purpose: Understanding the motives and benefits of volunteer vacationers. *Current Issues in Tourism*, 8(6), 479–496.
- Bruyere, B., & Rappe, S. (2007). Identifying the motivations of environmental volunteers. *Journal of Environmental Planning & Management*, 50(4), 503–516.
- Burton, P. J., Robertson, K. R., Iverson, L. R., & Risser, P. G. (1988). Use of resource partitioning and disturbance regimes in the design and management of restored prairies. In E. B. Allen (Ed.), *The Reconstruction of disturbed arid lands: An ecological approach*. Boulder, CO: Westview Press.
- Butcher, J., & Smith, P. (2010). Making a difference: Volunteer tourism and development. *Tourism Recreation Research*, 35(1), 27–36.
- Byrne, B. M. (1994). *Structural equation modeling with EQS and EQS/Windows*. Thousand Oaks, CA: Sage Publications.
- Byron, I., & Curtis, A. (2002). Maintaining volunteer commitment to local watershed initiatives. *Environmental Management*, 30(1), 59–67.
- Caissie, L. T., & Halpenny, E. A. (2003). Volunteering for nature: Motivations for participating in a biodiversity conservation volunteer program. *World Leisure Journal*, 45(2), 38–50.
- Callanan, M., & Thomas, S. (2005). Volunteer tourism: Deconstructing volunteer activities within a dynamic environment. In M. Novelli (ed.), *Niche tourism: Contemporary issues, trends and cases* (pp. 183–200). Oxford: Elsevier.
- Campbell, L. M. & Smith, C. (2006) What Makes Them Pay? Values of Volunteer Tourists Working for Sea Turtle Conservation. *Environmental Management*, 38(1), 84–98.
- Cnaan, R. A., & Goldberg-Glen, R. S. (1991). Measuring motivation to volunteer in human services. *Journal of Applied Behavioral Science*, 27(3), 269–284.
- Coghlan, A., & Fennell, D. (2009). Myth or substance: An examination of altruism as the basis of volunteer tourism. *Annals of Leisure Research*, 12(3–4), 377–402.
- Cousins, J. A., Evans, J., & Saddler, J. (2009). Selling conservation? Scientific legitimacy and the commodification of conservation tourism. *Ecology and Society*, 14(1), 32. Retrieved from <http://www.ecologyandsociety.org/vol14/iss1/art32/Research>.
- Donnelly, A., Crowe, O., Regan, E., Begley, S., & Caffarra, A. (2014). The role of citizen science in monitoring biodiversity in Ireland. *International Journal of Biometeorology*, 58(6), 1237–1249.
- Eagles, P. F. J. (1994). Understanding the market for sustainable tourism. In S. F. McCool & A. E. Watson (Eds.), *Linking tourism, the environment and sustainability* (pp. 23–33). Ogden, UT: USDA (General Technical Report INT-GTR-323).
- Fisher, D. R., Campbell, L. K., & Svendsen, E. S. (2012). The organisational structure of urban environmental stewardship. *Environmental Politics*, 21(1), 26–48.
- Gist, M. (1987). Self-efficacy: Implications for organizational behavior and human resource management. *Academy of Management Review*, 12, 472–485.
- Gooch, M. (2003) A sense of place: Ecological identity as a driver for catchment volunteering. *Australian Journal on Volunteering*, 8(2), pp. 23–33.
- Gössling, S., & Stavrinidi, I. (2016). Social networking, mobilities, and the rise of liquid identities. *Mobilities*, 11(5), 723–743.
- Greenwald, A. G., & Leavitt, C. (1984). Audience involvement in advertising: Four levels. *Journal of Consumer Research*, 11(1), 581–592.
- Gren, M., & Huijbens, E. H. (2012). Tourism theory and the earth. *Annals of Tourism Research*, 39(1), 155–170.
- Gupta, S., & Ogden, D. T. (2009). To buy or not to buy? A social dilemma perspective on green buying. *Journal of Consumer Marketing*, 26(6), 376–391.

- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). Upper Saddle River, NJ: Pearson University Press.
- Halpenny, E. A., & Caissie, L. T. (2003). Volunteering on nature conservation projects: Volunteer experience, attitudes and values. *Tourism Recreation Research*, 28(3), 25–33.
- Hanss, D., & Böhm, G. (2010). Can I make a difference? The role of general and domain-specific self-efficacy in sustainable consumption decisions. *Umweltpsychologie*, 14, 46–74.
- Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic consumption: Emerging concepts, methods and propositions. *Journal of Marketing*, 46(3), 92–101.
- Hu, L.-T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55.
- Huang H. (2016). Media use, environmental beliefs, self-efficacy, and pro-environmental behavior, *Journal of Business Research*, 69, 2206–2212.
- Hupfer, N. T., & Gardner, D. M. (1971). *Differential involvement with products and issues: An exploratory study* (pp. 262–270). Duluth, MN: Association for Consumer Research.
- Jordan W. R. III. (2003). *The sunflower forest. ecological restoration and the new communion with nature*. Berkeley and Los Angeles, USA: University of California Press Ltd.
- Kahn, P. H. Jr. (2002). Children's affiliations with nature: structure, development, and the problem of environmental generational amnesia. In P. H. Kahn Jr. & S. R. Kellert (Eds.), *Children and nature: Psychological, sociocultural, and evolutionary investigations* (pp. 93–116). Cambridge, MA: MIT Press.
- Kelly, J. (1983). *Leisure identities and interactions*. London: Allen & Unwin.
- Kormos, Ch, & Gifford, R (2014) The validity of self-report measures of proenvironmental behavior: A meta-analytic review. *Journal of Environmental Psychology*, 40, 359–371.
- Lee, S. J., & Lina Kim, H. (2018). Roles of perceived behavioral control and self-efficacy to volunteer tourists' intended participation via theory of planned behavior. *International Journal of Tourism Research*, 20(2), 182–190.
- Lorimer, J. (2009). International volunteering from the UK: What does it contribute? *Oryx*, 43, 1–9.
- Lorimer, J. (2010). International conservation 'volunteering' and the geographies of global environmental citizenship. *Political Geography*, 29(6), 311–322.
- MacCannell, D. (1976). *The tourist: A new theory of the leisure class*. California: University of California Press.
- Malone, S., McCabe, S., & Smith, A. P. (2014). The role of hedonism in ethical tourism. *Annals of Tourism Research*, 44, 241–254.
- Maurer, T. J. (2001). Career-relevant learning and development, worker age, and beliefs about self-efficacy for development. *Journal of Management*, 27(2), 123–140.
- McDougle, L. M., Greenspan, I., & Handy, F. (2011). Generation green: Understanding the motivations and mechanisms influencing young adults' environmental volunteering. *International Journal of Nonprofit and Voluntary Sector Marketing*, 16(4), 325–341.
- McGehee, N. G. (2002). Alternative tourism and social movements. *Annals of Tourism Research*, 29(1), 124–143.
- McGehee, N. G. (2012). Oppression, emancipation, and volunteer tourism. *Research Propositions. Annals of Tourism Research*, 39(1), 84–107.
- McGehee, N. G., & Santos, C. (2005). Social change, discourse, and volunteer tourism. *Annals of Tourism Research*, 32(3), 760–779.
- Measham, T. G., & Barnett, G. B. (2008). Environmental Volunteering: Motivations, modes and outcomes. *Australian Geographer*, 39(4), 537–552.
- Merenlender, A. (2017 November 17). The UC CA Naturalist Program. Retrieved from <http://ucanr.edu/sites/programteams/files/155344.pdf>
- Miles, I., Sullivan, W. C., & Kuo, F. E. (1998). Ecological restoration volunteers: The benefits of participation. *Urban Ecosystems*, 2(1), 27–41.
- Mustonen, P. (2006). Volunteer tourism: Postmodern pilgrimage? *Journal of Tourism and Cultural Change*, 3(3), 160–177.
- Nisbett, G. S., & Strzelecka, M. (2017). Appealing to Goodwill or YOLO? Promoting Conservation Volunteering to Millennials. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 28(1), 288–306.
- Norris, P. (2003). Young people and democratic institutions: From disillusionment to participation. Report for the Council of Europe Symposium: Strasbourg, 27–28 November.
- Packard, S. (1988). Chronicles of restoration: Restoration and the rediscovery of the tallgrass savanna. *Ecological Restoration*, 6(1), 13–22.
- Peachey, B. (2008). Environmental stewardship—What does it mean? *Process Safety & Environmental Protection: Transactions of the Institution of Chemical Engineers Part B*, 86(4), 227–236.
- Pearce P. L. (2009). The relationship between positive psychology and tourist behaviour studies. *Tourism Analysis*, 14, 37–48.
- Perring, M. P., Standish, R. J., Price, J. N., Craig, M. D., Erickson, T. E., Ruthrof, K. X., ... Hobbs, R. J. (2015). Advances in restoration ecology: rising to the challenges of the coming decades. *Ecosphere*, 6(8), 131.

- Pescott, O. L., Walker, K. J., Pocock, M. J. O., Jitlal, M., Outhwaite, C. L., Cheffings, C. M., ... Roy, D. B. (2015). Ecological monitoring with citizen science: The design and implementation of schemes for recording plants in Britain and Ireland. *Biological Journal of the Linnean Society*, 115(3), 505–521.
- Randle, M., & Dolnicar, S. (2009). Understanding the Australian environmental volunteering market: A basis for behavioural change and a sustainable future. *Australasian Marketing Journal*, 17(4), 192–203.
- Reeb, R. N., Katsuyama, R. M., Sammon, J. A., & Yoder, D. S. (1998). The community service self-efficacy scale: Evidence of reliability, construct validity, and pragmatic utility'. *Michigan Journal of Community Service Learning*, 5, 48–57.
- Rodriguez, J. P., Balch, J. K., & Rodríguez-Clark, K. M. (2007). Assessing extinction risk in the absence of species-level data: Quantitative criteria for terrestrial ecosystems. *Biodiversity and Conservation*, 16(1), 183–209.
- Rothschild, M. L. (1984). Perception on involvement: Current problems and future directions. *Advances in Consumer Research*, 11, 216–217.
- Ryan, R. L., Kaplan, R., & Grese, R. E. (2001). Predicting volunteer commitment in environmental stewardship programmes. *Journal of Environmental Planning and Management*, 44(5), 629–648.
- Schattle, H. (2008). *The practices of global citizenship*. Lanham: Rowman & Littlefield.
- Schild, R. (2018). Fostering environmental citizenship: the motivations and outcomes of civic recreation. *Journal of Environmental Planning and Management*, 61(5-6), 924–949.
- Schutte, N. S., & Bhullar, N. (2017). Approaching environmental sustainability: Perceptions of self-efficacy and changeability. *The Journal of Psychology*, 151(3), 321–333.
- Sparks, B. (2007). *Wine tourism consumer questionnaire* [Database record]. Retrieved from PsycTESTS.
- Steffen, W., Crutzen, P. J., & McNeill, J. R. (2007). The Anthropocene: Are humans now overwhelming the great forces of nature. *Ambio*, 36(8), 614–621.
- Stern, P. C. (2000). Toward a coherent theory of environmentally significant behavior. *Journal of Social Issues*, 56(3), 407–424.
- Strzelecka, M., Nisbett, G. S., & Woosnam, K. M. (2017). The nature of conservation volunteer travel. *Tourism Management*, 63, 417–425.
- Snyder, M., Clary, E. G., & Stukas, A. A. (2000). The functional approach to volunteerism. In G. R. Maio & J. M. Olson (Eds.), *Why we evaluate: Functions of attitudes* (pp. 365–393). Hillsdale, NJ: Lawrence Erlbaum.
- Suárez-Orozco, C., Hernández, M. G., & Casanova, S. (2015). "It's sort of my calling": The civic engagement and social responsibility of Latino immigrant-origin young adults. *Research in Human Development*, 12(1–2), 84–99.
- The Cornell Lab of Ornithology. (2017 November 17). *General environmental stewardship scale*. Retrieved from <http://www.birds.cornell.edu/citscitoolkit/evaluation/instruments>
- Tomazos, K., & Cooper, W. (2012). Volunteer tourism: At the crossroads of commercialisation and service? *Current Issues in Tourism*, 15(5), 405–423.
- Twenge, J. M., Campbell, W. K., & Freeman, E. C. (2012). Generational differences in young adults' life goals, concern for others, and civic orientation, 1966–2009. *Journal of Personality and Social Psychology*, 102(5), 1045–1062.
- Venhoeven, L. A., Bolderdijk, J. W., & Steg, L. (2013). Explaining the paradox: how pro-environmental behaviour can both thwart and foster well-being. *Sustainability*, 5, 1372–1386.
- Wearing, S. (2001). *Volunteer tourism: Experiences that make a difference*. Oxon: CABI Publishing.
- Wearing, S., Deville, A., & Lyons, K. (2008). The volunteer's journey through leisure into self. In K. D. Lyons, & S. Wearing (Eds.), *Journey of discovery in volunteer tourism*. Cambridge: MA: CABI.
- Wearing, S., & McGehee, N. G. (2013). Volunteer tourism: A review. *Tourism Management*, 38, 120–130.
- Wearing, S., Young, T., & Everingham, P. (2017). Evaluating volunteer tourism: Has it made a difference? *Tourism Recreation Research*, 42(4), 512–521.
- Weaver, D. (2013). Protected area visitor willingness to participate in site enhancement activities. *Journal of Travel Research*, 52(3), 377–391.
- Weaver, D. (2015). Volunteer tourism and beyond: Motivations and barriers to participation in protected area enhancement. *Journal of Sustainable Tourism*, 23(5), 683–705.
- Wiggins, J., Wiggins, B., & Vander Zanden, J. (1994) *Social Psychology* (5th ed.), McGraw-Hill: New York.
- Worrell, R., & Appleby, M. C. (2000). Stewardship of natural resources: Definition, ethical, and practical aspects. *Journal of Agricultural and Environmental Ethics*, 12(3), 263–277.
- Wray-Lake, L., Flanagan, C. A., & Osgood, D. W. (2010). Examining trends in adolescent environmental attitudes, beliefs, and behaviors across three decades. *Environment and Behavior*, 42(1), 61–85.
- Wymer, W. W. Jr., Self, D. R., & Findley, C. S. C. (2010). Sensation seekers as a target market for volunteer tourism. *Service Marketing Quarterly*, 31(3), 348–362.
- Zaichkowsky, J. L. (1985). Measuring the involvement construct. *Journal of Consumer Research*, 12, 341–352.



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